# Range extensions and other noteworthy bird records from the Ecuadorian Andes

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Summary.—We present the results of nine ornithological expeditions aimed at documenting bird diversity in areas of Ecuador that remain relatively underexplored. The majority of new records were made along the western Andes, either in the central or the southern extensions of the outer slope, suggesting that several species may have more continuous distributions than previously thought. Among the most interesting records are those of Collared Inca *Coeligena torquata* in western Azuay, Tricoloured Brush Finch *Atlapetes tricolor* in the Cerro de Celica-Guachanamá, in Loja, and White-browed Spinetail *Hellmayrea gularis* and Bluish Flowerpiercer *Diglossa caerulescens* in the Cordillera de Chilla, in El Oro. These new records in the south-west of the country suggest that extensive sampling is still needed in this region. We also report new altitudinal records for several species and suggest that they may represent range extensions rather than occasional records.

Among South American countries, Ecuador is one of the better studied in terms of its avifauna (Winker 1998). Nevertheless, several species and areas of the country remain poorly known, yet represent important priorities for research and conservation (Freile *et al.* 2006). Species distributions and biogeographic patterns are not well understood (Krabbe 2008), despite that a major compendium on the country's birds was published within the last decade (Ridgely & Greenfield 2001). Nevertheless, new records and range extensions are published regularly (e.g. Freile 2004, Cisneros-Heredia 2006, Solano-Ugalde *et al.* 2007) and continuous publication of such data is needed to understand the present, past and possible future biogeographic patterns across the country and the Neotropics. Herein, we present the results of nine ornithological expeditions aimed at documenting avian diversity in areas of Ecuador that remain relatively under-explored.

## Materials and Methods

Ornithological field work was carried out in February–December 2009 throughout the Ecuadorian Andes at 1,700–3,400 m. Sites surveyed included tracts of pristine or secondary montane forests. All specimens were collected using mist-nets and prepared as study skins, and are deposited at the Museo de Zoología (QCAZ), Pontificia Universidad Católica del Ecuador, in Quito. Previous knowledge of geographic distributions is based on Ridgely & Greenfield (2001), but taxonomy, species sequence and vernacular names follow Remsen *et al.* (2011). Locality information is provided in Table 1 and Fig. 1.

# Species accounts

## COLLARED INCA Coeligena torquata

Four specimens (QCAZ 3848, 3865, 3886, 4203) collected at the río Chipla, Cruzpamba, prov. Azuay, in secondary forest, on 13–17 January 2009, corresponded to *C. t. fulgidigula*, which

TABLE 1 Localities from where range extensions are reported (Fig. 1).

Locality	Coordinates	Altitude
Cordillera de Toisán, San Antonio de Cuellaje, Imbabura	00°29′39″N, 78°33′57″W	2,657 m
Bosque Protector Peñas Blancas, Salinas, Bolívar	01°25′53.00″S, 79°05′52.00″W	2,637 m
Reserva Ankaku, Pastaza	01°16′3.2″S, 78°02′52.4″W	1,679 m
Laguna Culebrillas, Parque Nacional Sangay, Cañar	02°25′35.60″S, 78°52′11.90″W	3,971 m
Río Chipla, Cruzpampa, Azuay	02°44′44.59″S, 79°24′32.11″W	2,464 m
Cordillera de Chilla, El Oro	03°30′11.41″S, 79°37′18.80″W	3,193 m
Huajalá, Loja	04°06′9.828″S, 79°58′46.704″W	2,100 m
Guachahurco, Parroquia Guachanamá, Loja	04°01′58.58″S, 79°52′11.06″W	3,102 m

also occurs elsewhere on the west slope of the Andes. Although this species is found on both slopes of the Andes, on the west slope it had been reported (at least historically) south only to western Chimborazo (Ridgely & Greenfield 2001), with a recent report from western Bolívar (Freile 2004). Our specimens extend the known distribution on the west slope south to western Azuay. Given that no obvious geographic barrier exists immediately south of this region, the species' range might continue south to the Pucará area, just north of the río Jubones.

## GORGETED SUNANGEL Heliangelus strophianus

A specimen (QCAZ 3509) from Bosque Protector Peñas Blancas, Salinas, prov. Bolívar, taken on 27 May 2009, in a forest fragment with bamboo patches and shrubs, was captured at a forest edge with several shrubs where other individuals were observed visiting Ericaceae



Figure 1. Map of Ecuador showing our study sites.

flowers. It is found along the west slope of the Andes, continuously through Carchi to Pichincha, with scattered records from Cotopaxi south to El Oro (Ridgely & Greenfield 2001). Ours is the first specimen from Bolívar. Whether the species has a continuous distribution along the west slope of the Andes of Ecuador requires elucidation.

## GREENISH PUFFLEG Haplophaedia aureliae

Two specimens (QCAZ 3802, 4204) collected at Reserva Ankaku, in mature forest, on 16 and 18 October 2009 were of the subspecies *H. a. russata*. Greenish Puffleg is patchily distributed on the east slope of the Andes, but seems more abundant on isolated ridges, such as Volcán Sumaco, the Cordillera del Condor, Cordillera del Cutucú and Cordillera de los Guacamayos (Ridgely & Greenfield 2001). Our record from near the Cordillera de los Llanganates confirms its presence in Pastaza from where there were no published records.

## WHITE-BROWED SPINETAIL Hellmayrea gularis

A specimen (QCAZ 3706) was taken in secondary scrub forest at the Cordillera de Chilla, prov. El Oro, on 18 August 2009. The species occurs on both slopes of the Andes; in the west it has been recorded south to Azuay (Ridgely & Greenfield 2001). Our specimen extends the known distribution south of the río Jubones, into the mountains of Chilla. As noted before, this isolated range merits further research to elucidate bird distribution patterns and to understand the role of the río Jubones as a barrier to species distributions (Krabbe 2008).

## STREAK-BACKED CANASTERO Asthenes wyatti

Three specimens (QCAZ 3874, 3940, 3976) were collected in grassy páramo at Laguna Culebrillas, Parque Nacional Sangay, prov. Cañar, on 4–5 December 2009. They corresponded to *A. w. aequatorialis* and are the southernmost specimens of this taxon. Krabbe (2000) reported a population of *A. w. aequatorialis* as far south as the Cajas plateau, but no specimens have been collected there. The other subspecies in Ecuador, *A. w. azuay*, was recently rediscovered by Krabbe (2000) and has been reported as far north as the Altiplano of Tarqui in southern Azuay (03°22′S, 79°11′W). Whether these two forms are geographically isolated or if their plumage differences represent clinal variation is unclear. Although their vocalisations are identical (Krabbe 2000), this might merely reflect recent geographic isolation.

## FLAMMULATED TREEHUNTER Thripadectes flammulatus

Two specimens (QCAZ 3585, 3587) were collected at Bosque Protector Peñas Blancas, Salinas, prov. Bolívar, in secondary forest, on 27 and 29 May 2009. Uncommon on both outer slopes of the Andes, and very local above the inter-Andean valley. On the west slope the species has been recorded south to Azuay, at Sural and Portete (Ridgely & Greenfield 2001). Our specimens and prior observations from Salinas (Poulsen & Krabbe 1998) confirm the species' presence in Bolívar.

### SLATY-BLACKED CHAT-TYRANT Ochthoeca cinnamomeiventris

Two specimens (QCAZ 3825, 3967) collected in secondary forest at the río Chipla, Cruzpampa, prov. Azuay, on 19 January 2010. Occurs on both slopes of the Andes, but on the west slope it is known to occur south only to Chimborazo (Ridgely & Greenfield 2001). Our specimens extend its southernmost limit to western Azuay, on the Cajas plateau, partially supporting the suggestion of Krabbe *et al.* (1998), who also found the species at Mazán on the east slope of the same plateau (N. Krabbe pers. comm.).

## YELLOW-BELLIED CHAT-TYRANT Ochthoeca diadema

Four specimens (QCAZ 3550, 3522, 3943, 4206) collected at Bosque Protector Peñas Blancas, Salinas, prov. Bolívar, in secondary forest, on 27 May 2009. Found on both slopes of the Andes, but in the west it has been recorded only as far south as Cotopaxi and locally to western Azuay, at Sural (Ridgely & Greenfield 2001). Our specimens confirm a previous sight record from Bolívar, at Tiquibuzo (Freile 2004).

## **SLATY THRUSH** Turdus nigriceps

A male (QCAZ 3873) collected near the canopy of a cloud forest at Huajalá, prov. Loja, on 26 February 2009, possessed significant fat but its age was not determined. Known to breed locally in Loja, but available evidence suggests that the species vacates this region during the second half of the year (Ridgely & Greenfield 2001).

## BLUISH FLOWERPIERCER Diglossa caerulesceus

A specimen (QCAZ 3707) was collected at the Cordillera de Chilla, prov. El Oro, in upper montane forest (3,193 m), on 18 August 2009. The site comprised secondary forest with scattered Spanish Cedar *Cedrela montana* and *Erythrina* spp. trees. The species is known from the west Andes south to Pichincha, with scattered records further south (Ridgely & Greenfield 2001). Two specimens deposited at the Academy of Natural Sciences Philadelphia collected at Portete (Azuay), and our record from Chilla, suggest this species might be more widespread in south-west Ecuador. Subspecific identification is difficult because differences from specimens taken on the east slope are subtle (i.e., plumage slightly duller overall in the east). Plumage variation in *D. caerulesceus* appears complex, even within east slope populations (Ridgely & Greenfield 2001), and there are two apparently undescribed subspecies, in the north-west (south to Pichincha) and the Cordillera del Cutucú (Fjeldså & Krabbe 1990).

## BLACK-CAPPED TANAGER Tangara heinei

A specimen (QCAZ 3299) was collected at Chilmá Bajo, 57 km west of Tufiño on the road to Chical, prov. Carchi, on 24 February 2009. The site was characterised by secondary forest with scattered Spanish Cedar *Cedrela montana* and *Erythrina* sp. trees. On the west slope of the Andes, *T. heinei* has been found locally at Pichincha (in the Tandayapa–Nanegal region) and more recently in southern Imbabura, east of Apuela (Ridgely & Greenfield 2001, Freile 2004). Our specimen represents the northernmost record on the west slope, and comes from an area close to the Colombian border.

# TRICOLOURED BRUSH FINCH Atlapetes tricolor

A specimen (QCAZ 3843) was collected at Guachahurco, Parroquia Guachanamá, prov. Loja, in shrubby forest, on 23 February 2010. Widespread and fairly common on the west slope of the Andes, from Esmeraldas south to Pichincha and west Cotopaxi, it has also been recorded at a few localities in Azuay and El Oro (Ridgely & Greenfield 2001). Our specimen indicates the species' presence in the Cerro de Celica-Guachanamá of Loja and also provides a new upper altitudinal limit, at 3,102 m; it was previously recorded to 2,300–2,400 m, in Cotopaxi (Ridgely & Greenfield 2001). Comparison with material at QCAZ revealed that our specimen corresponds to *A. tricolor*, and not to *A. lutinuclus*, which normally replaces the first-named species at higher elevations and has been recorded at 1,800–2,800 m in these mountains (N. Krabbe pers. comm.).

## Altitudinal records

We recorded several species outside their usual altitudinal range, as follows. Toucan Barbet Semnornis ramphastinus (QCAZ 3610), at 2,657 m, in the Cordillera de Toisán (Imbabura), on 19 January 2009; mostly recorded at 1,400–2,400 m. Bar-bellied Woodpecker Veniliornis nigriceps (QCAZ 3824) at 2,464 m, at the río Chipla, Cruzpampa (Azuay), on 18 January 2010; previous lowest records 2,800 m. Red-faced Spinetail Cranioleuca erythrops (QCAZ 3941) at 2,050 m, at Chilmá Bajo (Carchi), on 22 February 2009; previous highest record 1,900 m. Scaled Antpitta Grallaria guatimalensis (QCAZ 4205) at 1,679 m, in Reserva Ankaku (Pastaza), on 16 October 2009; recorded mainly below 1,300 m in the eastern foothills. Jelski's Chat-Tyrant Ochthoeca jelskii (QCAZ 3840, 3845) at 3,102 m, in Guachahurco (Loja), on 23 February 2010; previously recorded mostly to 2,800 m. Southern Rough-winged Swallow Stelgidopteryx ruficollis (QCAZ 3942) at 2,056 m, at Chilmá Bajo, (Carchi), on 25 February 2009; previously reported below 1,800 m. Masked Flowerpiercer Diglossa cyanea (QCAZ 3540–41), at 2,056 m, at Chilmá Bajo (Carchi), on 23–25 February 2009; recorded mainly at 2,400–3,500 m in northern Ecuador.

Given that continuous habitat exists between these records and the species' usual altitudinal ranges we believe that the above-mentioned records could represent 'real' altitudinal range extensions, at least locally, rather than occasional records.

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